2020-05

A Rendezvous with Discretion: An Analysis of Federal Simplified Acquisition Procedure Contracts

Brunjes, Benjamin

Monterey, California. Naval Postgraduate School

SYM-AM-20-054

PROCEEDINGS
OF THE
SEVENTEENTH ANNUAL
ACQUISITION RESEARCH SYMPOSIUM

Acquisition Research:
Creating Synergy for Informed Change

May 13–14, 2020

Published: April 13, 2020

Prepared for the Naval Postgraduate School, Monterey, CA 93943.

The research presented in this report was supported by the Acquisition Research Program of the Graduate School of Defense Management at the Naval Postgraduate School.

To request defense acquisition research, to become a research sponsor, or to print additional copies of reports, please contact any of the staff listed on the Acquisition Research Program website (www.acquisitionresearch.net).

A Rendezvous with Discretion: An Analysis of Federal Simplified Acquisition Procedure Contracts

Benjamin M. Brunjes—is an Assistant Professor at the Daniel J. Evans School of Public Policy and Governance at the University of Washington. He has a PhD in public administration and policy from the University of Georgia. His work on procurement and contract management has been published in the *Journal for Public Administration Research and Theory* and the *Journal of Strategic Contracting and Negotiation,* among others. Prior to his career in academia, Brunjes was an analyst for the Homeland Security Institute, a Department of Homeland Security federally funded research and development center located in Arlington, VA.

Abstract

Scholars have long argued about the role of discretion in public administration. For some, discretion is a means of applying needed expertise in administration, while others view discretion as a departure from democratic priorities. As administration becomes more complex, discretion is becoming more important for public managers. This paper assesses how federal contracting officials use discretion afforded via simplified acquisition procedures (SAP) to influence equity and performance. Findings indicate that when using discretion, contracting officials are less likely to select minority-owned and small businesses despite a preference for these vendors under SAP. However, SAP contracts are much less likely to terminate early than other contracts, indicating that federal contracting officials may use their discretion to improve contractor performance. This suggests that when using discretion, contracting officials may prioritize efficiency goals over equity concerns.

Introduction

Scholars have long debated the role of discretion in public administration. For some, bureaucratic organizations are a tool used to implement the policy decisions of democratically elected legislators and executives (Finer, 1936; McCubbins, Noll, & Weingast, 1987). Those who ascribe to this view hold that granting public administrators high levels of discretion can warp or circumvent processes designed to ensure accountability through the system of checks and balances established in the U.S. Constitution (Moe & Gilmour, 1995). Other scholars have argued that discretion is not only inevitable but also desirable, as public administrators possess technical expertise that can help solve complex problems and improve the overall efficiency of the system (Bertelli & Lynn, 2006; Friedrich, 1935).

It is also widely acknowledged that the organizational structures used to implement public policy are increasingly complex, as single organizations no longer possess the resources to solve "wicked" problems on their own (Agranoff & McGuire, 2003; Churchman, 1967; O'Toole, 1997). As a result, top-down control of the bureaucracy can be even more difficult, as it requires oversight of administrators across multiple levels of government as well as contractors, collaborators, grantees, and even citizen groups involved in the coproduction of public services (Bryson, Crosby, & Bloomberg, 2014; May & Winter, 2009; O'Toole & Meier, 2004; Poocharoen & Ting, 2015). However, there is little research on how discretion has been used under these complex conditions and what effect administrative discretion has had on performance.

This article assesses how federal contracting officials use their discretion to design contracts and whether their use of discretion improves access and contractor performance. Contract managers always have some discretion over contract design. Under certain circumstances, this discretion is broadened. Simplified acquisition procedures (SAP) reduce many of the procurement rules for federal contracts valued at less than $150,000 (Federal

Acquisition Regulation [FAR], 2014). Under SAP, federal officials are granted more discretion than they have on other contracts. Notably, contract design under SAP requires less documentation and reporting to justify decisions and interference from hierarchical management is reduced (FAR Part 13). SAP are designed to reduce the costs of administering federal contracts while also improving access for disadvantaged firms (FAR 13.002). Thus, the two primary rationales for SAP are improvements in efficiency and equity. To accomplish these goals, the federal government allows great discretion to contracting officials, who are freed from guidelines about competition, financial structure, and various other components of contract design. Comparing SAP contracts to the other contracts allows insight into how discretion is used and whether its use improves equity and efficiency.

The following section analyzes the literature on discretion and contracting to clearly specify the contribution of the present research. The subsequent section provides the technical information on simplified acquisition procedure and how they allow contracting officials greater discretion. Then, I introduce my hypotheses, data, and analytic methods. The following sections present my results and discuss their meaning in the context of discretion and public values of efficiency and equity. I conclude with remarks about implications for practitioners and scholars.

Discretion and Contracting

Discretion has been defined in terms of both bureaucratic politics and individual-level decision-making. Scholars of bureaucratic politics have tended to focus on the macro-level autonomy afforded to public agencies during policy implementation (Gruber, 1987; Riley, 1987). Other scholars have studied the ways that administrators at the street level can influence policies and programs through decision-making based on individual expertise (Hupe, 2007; Lipsky, 1980). This study focuses on discretion in the context of micro-level decision-making.

Street-level bureaucrats operate in complex environments that reduce external control and require quick and influential decision-making at the point where government interacts with citizens (Lipsky, 1969). Contracting officials are the interface through which the government engages the private marketplace for goods and services. In this role, contracting officials generally control decisions related to setting requirements, establishing the period of performance, selecting the solicitation procedures, determining the payment structure and payment schedule, evaluating the contractor's performance, responding to emergencies and performance problems, and providing performance incentives (Curry, 2010). Thus, contracting officials wield micro-level discretion over many of the most important decisions that affect the relationship between government and its vendors. How they choose to wield this discretion is likely to affect outcomes, as it does in other areas of street-level bureaucracy such as social services, education, and law enforcement (Atkins, 2013; Cooper, 1980; Maynard-Moody & Musheno, 2000; Riccucci, 2005; Wilkins, 2008).

Contracting is also an area where there is persistent concern over the potential for corruption and lack of accountability (Cohen & Eimicke, 2008; Curry, 2010). In the case of government contracting, discretion may make this perception worse, as it can make the system seem unpredictable to potential contractors, political overseers, and the general public (Girth, 2014). Citizens and policy-makers expect contracting officials to tailor contract requirements to the contextual demands of the good or service needed, while also applying consistent evaluation and management criteria when assessing bids and monitoring contractor performance. There is evidence that, when discretion is high, administrators may be more likely to follow legal procedures to justify their actions should a conflict arise (Bardach & Kagan, 1982). However, others assert that properly disciplining contractors

requires the targeted use of technically informed administrative discretion (Kelman, 1990). Thus, contracting officials are expected to use their discretion to both hold contractors accountable and navigate the legal and political environment. Yet little work has been done that directly addresses the role of discretion in government contracting.

Clearly, more research is necessary in this area. When afforded the opportunity to use discretion, how do public contracting officials use it? How does the use of discretion influence what kinds of contractors are selected? And does discretion influence contractor performance? This research seeks to fill these gaps. Before these questions can be answered, it is necessary to provide some background in federal simplified acquisition procedures, which grant federal contracting officials wider discretion than they have when managing other contracts.

Federal Simplified Acquisition Procedures

Simplified acquisition procedures (SAP) give managers the discretion to choose design elements more freely for contracts valued at less than the simplified acquisition threshold (FAR 2.101). The SAP threshold is currently $150,000 for most goods and services but can be as high as $7 million for contracts that, based on the expectations of the contracting officer, will exclusively involve the purchase of commercial items (FAR 2.101, FAR 13.500). Federal contract managers who use SAP are able to apply professional expertise to design contracts based on the circumstances and contract requirements. According to FAR 13.002, SAP are designed to:

- Lower administrative costs associated with contract administration
- Improve access to government contracts for disadvantaged businesses
- Increase the efficiency of the contracting process for smaller contracts

For federal contracting officials, SAP remove many procurement regulations, allowing greater managerial discretion in an effort to reduce administrative costs. While the procedures still explicitly state a preference for competitive bidding (FAR 13.104), federal officials are granted the freedom to use a single source if they perceive that source to be the best "reasonably available" (FAR 13.106-1[2][b]). Sole source justifications under SAP are much shorter and require less oversight from superiors (FAR 13.106-1[2][b]). This reduces the administrative burden associated with justifying the use of sole source contracts. SAP also allow federal officials to use standing price quotations, wherein companies make fixed bids for the provision of particular types of goods and services which are broadly available to contracting officials across government. Using standing price quotations eliminates the need to fully solicit bids for each SAP contract, lowering costs for both the contractor and the agency (FAR 13.103). Finally, SAP free federal contracting officials to evaluate bids based on the official's discretion (FAR 13.106-2[b]). While they still must review all bids, they are not forced to evaluate them using the somewhat rigid procedures prescribed for the review of sealed bids or negotiated proposals. Many steps, such as formal evaluation plans, competitive ranges, and quotation scoring are not necessary if factors other than price are important for source selection (FAR 13.106-2[b][3]). By removing these requirements, the contracting official can tailor the evaluation criteria and procedures to the purpose of contract, including the desired timeline of the procurement. Taken together, these procedures allow federal contracting officials much greater discretion in contract design and management in an effort to improve the efficiency of contracting initiatives.

To increase equity, SAP establish priority for disadvantaged businesses, including those that qualify as 8(a), historically underutilized business zone (HUBZone), service-disabled veteran–owned, and woman-owned small businesses (FAR 13.003[b]). By the law,

any acquisitions for goods or services valued between $3,000 and $150,000 are to be reserved for such disadvantaged businesses (FAR 13.003[b][1]). Through this preference, SAP are designed to allow greater access for disadvantaged firms. However, the decision *not* to use one of these sources is not subject for review (FAR 13.003[b][3]), leaving contracting officials with great discretion over the selection of disadvantaged vendors. This presents an excellent opportunity to study whether contracting officials actually use their discretion to promote access and equity, or whether they instead focus on other values.

Research Question and Hypotheses

Though contracting officials always have control over important contracting decisions and wield discretion that can influence contract outcomes (Brown, Potoski, & Van Slyke, 2006; Cooper, 1980), SAP create a subset of contracts where reliance on technical expertise is much greater. This analysis investigates how this discretion is used and whether it influences contractor performance.

Before investigating the impact of discretion, it is necessary to examine how federal contracting officials use SAP to design contracts. Administrative discretion through SAP is only important if public managers choose to use it. There is evidence that government is engaging in contracts without making workforce changes necessary to ensure adequate personnel and expertise for effective contract management (Brown et al., 2006; Milward & Provan, 2000). As a result, contracting officials may be overburdened and undertrained (Cohen & Eimicke, 2008). In such circumstances, it might be reasonable to expect that contracting officials might be unable to actually use much discretion, instead opting to follow standard operating procedures regarding contract design. Or, contract managers might design contracts that place the burden of performance on the contractor, reducing the need for active oversight (Girth, 2014, 2017).

Contract design refers to the administrative steps taken to specify the work to be performed, reduce risk to the government, and ensure the selection of the best vendor (Shetterly, 2000). This analysis focuses on two facets of contract design: competitive sourcing and the financial structure (or type of contract). Competitive sourcing relies on the market to set the most efficient price for the good or service desired (Weimer & Vining, 2005). Competition also promises a ready supply of substitute vendors should the selected vendor fail to perform. Thus, competition can reduce the burden on contracting officials, as the market should naturally provide low prices, limit the need for strict oversight, and even spur innovation as contractors seek to gain short-term advantages over one another. SAP have an expressed preference for competitive sourcing, and it is likely that contracting officials have incentives to use this approach when possible to both reduce their own workload and boost performance.

> H_{1a}: Contracts using SAP will be more likely to use competitive sourcing than other contracts.

Financial structures can be used to allocate risk among parties to a contract. Fixed-price financial structures shift performance risk to the contractor, as the contractor must work to complete to work as far below the fixed-price ceiling as possible to maximize profit. Cost-reimbursement and time-and-materials contracts incentivize contractors to continue to charge to the contract to maximize profits. These types of contracts also require contracting officials to conduct ongoing reviews of receipts to monitor performance (Shenson, 1990). Overburdened federal contracting officials may, when given discretion, attempt to use it to reduce their workload and shift risk to contractors by selecting fixed-price contracts.

H_{1b}: Contracts using SAP will be more likely to use fixed-price payment structures than other contracts.

Evidence suggests that public managers use discretion, particularly bargaining and collaboration, in ways that are consistent with organizational goals and contextual considerations (Agranoff & McGuire, 2003). One of the primary goals of SAP is to increase access to government contracts for disadvantaged businesses (FAR 13.002). Previous studies have shown that public managers use discretion to increase representation in government (Sowa & Selden, 2003). There is also evidence that contract managers promote representativeness when selecting contractors, as agencies with more minorities are more likely to select minority-owned contractors (Fernandez et al., 2013; Smith & Fernandez, 2010). Since the FAR specifically reserves SAP contracts for disadvantaged groups, these types of organizations should be more heavily represented, though it may depend on the product or service area.

H_{2a}: Contracts using SAP are more likely to be with minority-owned businesses than other types of contracts

H_{2b}: Contracts using SAP are more likely to be with woman-owned businesses than other types of contracts

H_{2c}: Contracts using SAP are more likely to be with veteran-owned businesses than other types of contracts

H_{2d}: Contracts using SAP are more likely to be with all disadvantaged businesses than other types of contracts

Public administrators are hired for their technical expertise. Contracting officers are experts in the management of public procurement, though they are often constrained by procurement regulations (Kelman, 1990; Rainey & Bozeman, 2000). Removing constraints reduces transaction costs for both contractors and the government, allowing for a greater focus on efficiency (Brown & Potoski, 2003). When freed to make their own decisions about contract design, including competition, source selection, and performance evaluation, there is some evidence that overall performance in the procurement of complex products can improve (Kelman, 1990). Though ethical concerns may arise (Finer, 1936; Moe, 1987), SAP procedures have built-in mechanisms designed to limit corruption and maximize transparency, thus preserving accountability (FAR 13.104). As a result, simplified acquisition procedures, which remove many procurement regulations for both government officials and contractors, can be expected to result in higher performing contracts.

H_3: Contracts using SAP are less likely to terminate early than other types of contracts

Data and Methods

The data for this analysis comes from the Federal Procurement Data System–Next Generation (FPDS–NG). This database, created in 2004, captures information on all unclassified federal contracts. I examine federal definitive contracts—standalone contracts for complex products and services. My sample consists of the 24,396 complex definitive contracts that ended between 2005 and 2014. Of these, 4,195 (17.20%) used SAP. SAP are used on a range of contracts. In this sample of definitive contracts, the work performed tends to be fairly complex, as simpler work tends to use purchase orders or indefinite delivery vehicles for procurement. The most common types of work performed on SAP contracts in these data were research, data processing and telecommunications services, management support services, and physical construction and site maintenance. These are

complex contracts that require contracting officials to apply expertise for effective management. In this study, I compare this subset of contracts where managers are granted a greater degree of discretion to traditional contracts, which are subject to all federal procurement regulations. Table 1 provides descriptive statistics of the dependent variables used in this analysis.

The first part of my analysis investigates how public managers use the discretion that is afforded to them. The FAR prefers the use of competitive, fixed-price contracts. However, these two measures (competitiveness and financial structure) do not correlate well enough to create a unified scale measuring contract design diversity (Cronbach's alpha = 0.11). As a result, I treat each decision separately. Doing so requires ordering the preferences within the FAR about competitive sourcing and financial structure. In the case of competitiveness, full and open competition is desired. When full competition is not possible, the FAR allows for certain exclusions. Only in extreme cases (emergency, unique expertise, high levels of uncertainty about requirements, etc.) should contracts not be competitively sourced. Similarly, fixed-price contracts are preferred because they shift financial risk to the contractor. However, they are sometimes not possible as requirements are uncertain, necessitating the use of cost-reimbursement contracts. Time-and-materials contracts, which incentivize longer durations and cost overruns, are least preferred. The result is a pair of ordered preference categories for both the competitiveness of the solicitation and the financial structure of contracts (shown in Table 2).

I hypothesize that, even though they are given discretion through SAP, public officials are likely to choose contract design elements that are consistent with the guidelines of SAP and leverage market forces to improve price efficiency and shift risk to contractors. Fixed-price contracts and market competition have the convenient benefits of lowering contracting officials' workloads while also providing professional cover should performance problems occur. To analyze this, I use two multinomial logistic regression models[1] to determine the probability of SAP contracts using the various competitive sourcing procedures and financial payment structures:

$$\underline{\text{Model 1:}}\ Pr \mid \text{Competitive Sourcing Procedures} = \alpha + \text{Discretion} + \text{Complexity of Good/Service} + \text{Agency Characteristics} + \text{Importance of Contract} + \text{Market Characteristics} + e$$

$$\underline{\text{Model 2:}}\ Pr \mid \text{Contract Financial Structures} = \alpha + \text{Discretion} + \text{Complexity of Good/Service} + \text{Agency Characteristics} + \text{Importance of Contract} + \text{Market Characteristics} + e$$

The primary explanatory variable, discretion, is a dichotomous indicator of SAP contracts. I also include control variables to account for the good or service procured,

[1] An ordered logit model might be appropriate because the variables of interest (indicators of the ordinal preference of contract competitiveness and financial structure) are categorical with exclusive, ordered categories. However, Brant tests indicate that the parallel regression assumption is violated in both models. These assumptions are also not met in generalized ordered logit models, which relax the parallel regression assumption somewhat (Brant, 1990; Williams, 2006). Since the parallel regression assumption is violated in both ordered models, multinomial logit models are appropriate as replacement estimators (Williams, 2006). Hausman tests indicate that the assumption of the independent alternatives is not violated (Hausman & McFadden, 1984).

agency characteristics, market characteristics, and the relative importance of the contract for the agency and contractor. Complexity of the good or service is operationalized as a dichotomous measure of the type of contract being delivered (good or service) as well as dummy variables for construction, research, training, information technology, and professional services contracts. Agency characteristics included in these models are dichotomous indicators of agency type (cabinet department, distributive, redistributive, regulatory, and constituent services), the professional staff ratio, agency size (measured by size of budget and number of employees), and age in years. The contract's importance to the agency is measured as the total contract value as a percentage of the agency budget and of the contractor's annual revenue. Finally, market characteristics are operationalized as the number of bids received and dichotomous indicators for procurements during recession years, the fourth quarter of the fiscal year, and contracts written in response to emergencies. These models test whether SAP lead to greater diversity of contract design structures, controlling for institutional and process factors.

Hypotheses 2a–2d hold that SAP contracts are more likely to use disadvantaged businesses, as the program is designed to set aside these contracts for such firms. To test these hypotheses, I use four logistic regression models, which are shown below. Each model uses a dichotomous indicator of the type of contractor as the dependent variable. The explanatory variable in each is a dichotomous indicator of whether the contract used SAP. I employ the same control variables as in the previous models. The models test whether SAP contracts are more likely to use disadvantaged contractors.

Model 3: Pr | Selecting a Minority-Owned Contractor = α + Discretion + Complexity of Good/Service + Importance of Contract + Market Characteristics + e

Model 4: Pr | Selecting a Woman-Owned *Contractor = α + Discretion + Complexity of Good/Service + Importance of Contract + Market Characteristics + e*

Model 5: Pr | Selecting a Veteran-Owned Contractor = α + Discretion + Complexity of Good/Service + Importance of Contract + Market Characteristics + e

Model 6*: Pr | Selecting any Small, Disadvantaged Contractor = α + Discretion + Complexity of Good/Service + Importance of Contract + Market Characteristics + e*

Finally, I hypothesize that SAP contracts will perform better due to the amount of discretion given to contracting officials to establish design elements and select vendors. Previous measures of performance have compared the cost of contracting with government service provision (Savas, 1977; Savas, 2002) or relied on surveys and interviews for performance information (Brown & Potoski, 2003; Romzek & Johnston, 2005). However, cost comparisons tell us little about performance, focusing instead on inputs. Surveys and interviews have well documented problems, particularly around the reliability of individuals' ability to accurately assess their own performance and the performance of those to whom they are professionally tied (Julnes, 2001; Poister, 1999). Here, I introduce a new measure of performance based on how contracting officials document the completion of contracts.

Contracts generally end in closeout or termination. Closeout signifies, at bare minimum, acceptable performance. Closeouts account for more than 90% of all contract completions. Within this group, there is likely some variation in performance. Thus, I have further segmented this category into high- and low-performing closeouts. High-performing

closeouts are classified as those where the federal government never de-obligated funds from the contractor. Continued payments show ongoing acceptability of the contractor's work throughout the period of performance. Low-performing closeouts are those where the government de-obligated more than 50% of the total contract value. Taking money back indicates that the government has justified recouping some of its investment due to potential performance problems. Termination signals performance problems. The federal government terminates contracts for convenience, default, and cause. Terminations for convenience are used to end contracts without assigning blame to the contractor, though in many cases officials use this type of termination to avoid lawsuits (Cibinic, 2006). Terminations for default and cause are used to end poorly performing contracts for commercial and non-commercial goods and services, respectively. The online appendix to this article provides more details on this variable of interest and these outcome categories.

This variable has a few important benefits. First, it is an outcome measure that captures whether the government found the work acceptable or not. Second, it is an official record of the documented performance on the contract that was made by a knowledgeable contracting official at the moment where they knew the most about the contractor and their performance. Third, it allows comparison across multiple types of products and services. A termination means the same thing, from a performance perspective, whether the contract was for office supplies or consulting services. As a result, this variable is an improvement of other variables that allows us to not only investigate a broader sample of contracts, but also allows us to measure outcomes instead of just inputs or perceptions of performance. To test my performance hypothesis, I use a multinomial logistic regression model to determine whether SAP contracts are more or less likely to terminate early than other types of contracts. The regression model is expressed below:

$$\underline{\text{Model 8}}: Pr \mid \text{Contractor Performance} = \alpha + SAP + \text{Contract Requirements} + \text{Procurement Conditions} + \text{Department Characteristics} + \text{Vendor Characteristics} + e$$

A multinomial model is appropriate because the variable of interest (performance) is categorical with exclusive categories (closeout, termination for convenience, termination for cause, and termination for default) that are unordered. The variable of interest is contractor performance, as indicated by the final reason for modification documented in FPDS–NG. α is the intercept. The primary explanatory variable is a dichotomous indicator of whether the contract used simplified acquisition procedures. This dummy variable is an indicator of the presence of bureaucratic discretion. The model also includes 45 control variables that account for the complexity of the contract, agency characteristics, conditions during the procurement, and the strength of the market.[2] As with the controls in the previous models, these are meant to control for internal and external conditions that might affect each contract.

Findings

Tables 3, 4, and 5 display the results of my regression analyses. Table 3 presents the results of multinomial logistic regressions associated with H1a and H1b. Table 4 shows

[2] Additional information on these control variables can be found in the attached reviewer appendix, including sources and justifications for all 45 variables, as well as descriptive statistics.

the results of logit models assessing the effect of SAP on equity programs related to H2a, H2b, H2c, and H2d. Table 5 presents the results of my analysis of contractor performance, pertinent to H4. To facilitate the interpretation of regression results, Tables 3 and 5 display relative risks, while Table 4 presents odds ratios.

SAP contracts are more likely to be competitively sourced and to use fixed-price payment structures. As Table 3 indicates, SAP contracts are much less likely to use other types of payment structures and competitive sourcing procedures. SAP contracts are half as likely as non-SAP contracts to be sole sourced and half as likely to use exclusionary procedures. Similarly, when using discretion, managers are half as likely to choose time/labor contracts and are extremely unlikely (one-tenth) to use cost-reimbursement structures. When using discretion, federal contract managers seem to rely on market mechanisms to promote price efficiency and to shift financial risk to contractors. As a result, I find strong support for both H1a and H1b. As expected, contract work complexity seems to be related to the more frequent use of less-preferred contract design elements. This makes sense, as with rising complexity, markets may become weaker and the clear requirements may become more difficult (Brown et al., 2013; Curry, 2010; Shenson, 1990). Contracts for services (particularly complex services where markets may be less competitive like IT, research, and professional services) and contracts by agencies with more professional workforces (like NASA or the Department of Energy) are consistently more likely to use less-preferred contract designs such as sole sourcing and cost reimbursement. Contracting officials clearly use their discretion to respond to work requirements and market conditions.

Table 4 presents results related to equity goals. Despite the fact that the express purpose of SAP is to allow greater access for disadvantaged businesses, my analyses show that the program is actually less likely to select minority-owned and small business contractors. In addition, there is no significant relationship between SAP and contracting out to veteran-owned businesses. Woman-owned businesses are 25% more likely to be selected as contractors under SAP, the only disadvantaged group to experience any benefit from the program. These findings are disappointing, as SAP are specifically designed to improve access for such firms to increase their chances for growth and sustained success. The SAP program does not seem to be meeting its equity goals. Thus, there is no support for Hypotheses 2a, 2c, and 2d. While there is support for Hypothesis 2b, the practical effect is fairly small, as woman-owned business are only 25% more likely (or 1.25 times as likely) to receive contracts through SAP.

Table 5 presents the results related to contractor performance. Findings indicate that SAP contracts are less likely to be terminated early than other contracts. Specifically, SAP contracts are 20% less likely to terminate for convenience and 30% less likely to terminate for both default and cause. This is consistent with Hypothesis 3. Federal contracting officials seem to be able to use their discretion to reduce the likelihood of contract termination and thus increase the likelihood of acceptable performance. However, SAP contracts are also 23% more likely to end in low-performing closeout, with the government having to take back more than half of the dedicated resources, and nearly 20% less likely to end without taking back any funds. This suggests that while SAP may reduce the likelihood of extremely poor performance, the use of discretion alone may not encourage particularly good performance.

In summary, the present analyses indicate that federal contracting officials use their discretion to mainly design fixed-price, competitive contracts that shift risk and managerial burdens to contractors. Other types of contracts are comparatively rare, but are used appropriately on contracts for more complex goods and services. Hypotheses 1a and 1b are supported. However, SAP equity goals are not met, as disadvantaged businesses tend to be less likely to win contracts using the procedures. Woman-owned firms are the exception, as

they are slightly more likely to be selected under SAP. Hypotheses 2a, 2c, and 2d are not supported, though Hypothesis 2b is. Finally, SAP contracts are less likely to be terminated early, suggesting that federal contracting officers are able to use their authority to improve contractor performance. Hypothesis 3 is supported.

Discussion

There is a longstanding debate over the role of discretion in public administration. Discretion can be used to apply technical expertise to problems that are beyond the knowledge and control of legislators (Meier & O'Toole, 2006; Vaughn & Otenyo, 2007). However, it also has the potential to weaken accountability in ways that could threaten the American democratic system of popular agenda setting and institutional checks and balances (Finer, 1936; Gruber, 1987; McCubbins et al., 1987). Previous studies of the use of discretion in contracting have suggested that its application could improve efficiency by reducing transaction costs associated with procurement regulations and by affording experienced managers the chance to influence contract design and management more effectively (Kelman, 1990; Girth, 2014). My results indicate that efforts to free contract managers from red tape have had mixed effects on efficiency and equity.

Girth (2014) found that, when given the chance to wield discretion, public contract managers were less likely to use officially documented sanctions to influence performance. Instead, they were more likely to bargain or use informal methods of communication to attempt to improve the contract. Indeed, many of the contracting officials interviewed stated that, given discretion over a contract, they were more likely to simply trust the contractor to get the work done effectively. These public managers were highlighting a tendency to shift the burden of contract management from the government to the contractor. My findings are consistent with this interpretation. Other recent studies have shown that federal contracting officials tend to be overburdened (Copeland, 2011). As a result, it is not surprising that, given the chance, contract administrators attempt to design contracts that leverage market benefits while reducing their own workload. As in Girth's (2014) study, I find that contracting officials are largely content to place their trust in the markets and in their contractors when they are given discretion. My findings augment Girth's perceptual measures with a comprehensive analysis of a large sample of complex contracts.

SAP are designed to improve the efficiency of contracting. SAP reduce transaction costs associated with transparency, information exchange, and accountability for both the government and the contractor. As a result, contracts should be less costly and ultimately more efficient. However, cost is just one way to measure efficiency. My measure, contractor performance, assesses what the government receives for their investment instead of just looking at the initial investment. In this instance, performance serves as an indicator of efficiency. Terminations are costly and inefficient—costs ignored by traditional measures of efficiency focused on initial investment. My results show that SAP contracts are significantly and substantially less likely to terminate early than other types of contracts. This indicates that federal managers are able to use their discretion to design and oversee contracts more efficiently.

My findings are consistent with much of the existing literature in public administration that demonstrates that public managers can improve programs and associated outputs in education, law enforcement, social work, and human capital management (Lipsky, 1969; Maynard-Moody & Musheno, 2003; Meier & O'Toole, 2006; Riccucci, 2005). In each of these studies, the authors argue that administrative discretion can be used to increase public value, an argument that runs counter to much of the literature on bureaucratic control, which adopts a normative perspective that administrative discretion is anathema to a

democratic system of governance (Finer, 1941; Riley, 1987). The pro-discretion argument springs from conceptualizations of neutral competence and internal accountability that have long been central to public management (Friedrich, 1935; Kaufman, 1956). Public administrators are hired primarily for their technical expertise in a particular area (Christensen, Goerdel, & Nicholson-Crotty, 2011; Wilson, 1887). This expertise qualifies them to make decisions that influence public policy. Historically, political influences on policy have resulted in efforts to try to separate administrators from politics to ensure that competent decisions are made based on technical expertise instead of passing political fancy (Kaufman, 1956). Instead of relying on external mechanisms alone to hold administrators accountable, professional standards, training, and internal motivation serve to ensure responsible behaviors (Friedrich, 1935). The application of neutrally competent expertise can be thought of as a way to ensure that public values are preserved, particularly those related to efficiency and effectiveness, values which legislatures often struggle to achieve (Battaglini & Coate, 2005).

My analysis indicates that federal contract managers can improve the performance of federal contractors, thus increasing the efficiency of federal procurement. When freed from rules designed to ensure accountability and limit ethical violations, such as posting solicitation announcements to the central government procurement portal, contracting officers design and implement contracts that are between 20% and 30% less likely to terminate. This reduces costs associated with both termination and the management of bad contracts (GAO, 2008). My findings indicate that contracting officials have the technical expertise and training to positively influence federal contractor performance and increase the efficiency of federal procurement efforts.

However, there is also a cost associated with granting discretion. SAP have a dual goal of increasing efficiency and equity. My analysis shows that, despite a specific mandate to provide set-asides for small, disadvantaged businesses, SAP contracts are less likely to be awarded to these kinds of contractors. In particular, minority-owned businesses, veteran-owned businesses, and SBA-identified small businesses all receive fewer contracts under SAP. There are some specific kinds of contracts where other types of disadvantaged businesses see benefits, particularly IT and construction. This makes sense, as minority-owned firms are uncommon in particular industries (Bates, 1989; Lowrey, 2007). But on the whole, disadvantaged businesses are not seeing huge benefits from SAP. Even woman-owned businesses, which experience a slight advantage from the program, are not experiencing large effects. Taken together, the implication is clear: contract managers are using SAP to accomplish efficiency goals, not equity goals.

Conclusion

My analysis establishes that federal contracting officials use their discretion to influence contract design and management. SAP contracts are more likely to use design mechanisms that leverage market forces and reduce oversight demands. Despite purported equity goals, SAP contracts are less likely to go to most types of disadvantaged businesses. However, contract managers are able to effectively use their discretion to reduce terminations, thus improving the efficiency of federal procurement. These findings are consistent with other analyses of discretion in public management. Discretion can be used to increase performance but may also have unexpected consequences. In this case, efficiency seems to be improved while equity initiatives are weakened.

It is worth noting two shortcomings of this analysis. First, one concern often associated with administrative discretion is that it can increase the likelihood of fraud or other ethical violations. FPDS–NG does not include any information on fraudulent behavior,

making it impossible to assess whether SAP contracts are associated with problems of this type. Additional data would be needed to conduct such an analysis.

Second, I do not include measures of regional or local-level market variation. It is well documented that disadvantaged firms are more common in certain industries (Bates, 1989; Lowrey, 2007). Couple these trends with regional variations in the overall representation of various disadvantaged groups, and it is evident that the present national-level analysis may gloss over important differences between markets. This is an area where additional research could help clarify how to encourage growth of particular kinds of firms based on a more detailed assessment of regional or local conditions.

In a system designed to ensure accountability, this research has mixed implications for practice. The U.S. system is often criticized for being slow moving, with change only occurring incrementally (Lindblom, 1959). As a result, getting things done can be very difficult. Contracts are a tool that is increasingly used to get things done more quickly and efficiently (Kelman, 1990; Salamon, 2002). For this purpose, SAP seem to deliver admirably, increasing competitive sourcing, reducing the need for constant oversight, shifting risk to contractors, and reducing the likelihood of early termination. However, the program is not increasing access to government contracts for disadvantaged businesses. While this may be due to weaknesses in markets for complex goods and services, the result is the same: at-risk firms are not winning nearly as many contracts as they do under regular procurement conditions, despite having express preference in SAP. Equity goals are not being met. Additional action may be required to both ensure the development of small businesses capable of providing these services and to encourage federal contracting officials to use such businesses when they are available.

This study is an effort to compare a large number of contracts with varying purposes and originating agencies. As such, it has greater explanatory power than many previous studies on contracting. However, it is also very difficult to account for all of the variables in contracting. Despite including a thorough list of control variables to account for the context of each contract, omitted variable bias is always possible. In addition, this work is exploratory. While many of the findings are interesting, more detailed research needs to be conducted to explain some of the findings. Three immediate follow-on studies are evident. First, this analysis is limited to more complex contracts from within those eligible for SAP. SAP are more commonly used for simple procurement, such as purchase orders and task orders. These other types of contracts could use more disadvantaged contractors, making up for their relative scarcity here. Second, additional research could more carefully classify the strength of disadvantaged firms in particular markets. Having a clearer understanding of what kinds of goods and services these firms are providing could help explain why equity goals are not being met and perhaps provide insight into how to better manage these markets. Finally, SAP are just one way that contracting officials use discretion. Contracting officials have discretion throughout the contracting cycle. Future research could look at how contracting officials justify using this discretion and the impact that it has on contractor selection and performance. For example, contracting officials must write justifications for sole-source acquisitions. Analyzing these justifications could provide insight into how discretion is used to influence competition and ultimately performance.

This study indicates that federal contracting officials use their discretion in ways that influence contract design, equity, and efficiency. This is some initial evidence that discretion matters for the management of public contracts. Consistent with existing literature on discretion, public contract managers can influence public values through the application of their technical expertise. Contractor performance improves under SAP, suggesting that contracting officials retain administrative responsibility despite fewer external mechanisms to

ensure accountability. Though efficiency seems to be the preeminent value for SAP, its equity implications deserve further attention from both scholars and practitioners.

Tables

Table 1. Descriptive Statistics: Variables of Interest, Models 2–8

Variable	Model	0	1	Mean
SAP	all	20,201	4,195	17.20
Minority-Owned	3	18,763	5,633	23.09
Woman-Owned	4	20,987	3,409	13.97
Veteran-Owned	5	22,060	2,336	9.58
Small Business	6	17,615	6,781	27.80
Contracting Officer SBA	6a	7,834	16,562	67.89

Table 2. Descriptive Statistics: Occurrences of Ordinal Preference of Competition and Financial Structure (Models 1 and 2)

Competition				Financial Structure			
Mechanism	*Preference*	*Count*	*Pct.*	*Mechanism*	*Preference*	*Count*	*Pct.*
Full and Open	Most Preferred	10,301	42.22	Fixed-Price	Most Preferred	19,236	78.85
Exclusions	Less Preferred	4,904	20.10	Cost-Reimbursement	Less Preferred	2,331	9.55
Not Competed	Least Preferred	9,191	37.67	Time-and-Materials	Least Preferred	2,829	11.60

Table 3. Effect of SAP on Selection of Contract Design Elements

Variable	Type	Model 1: Preference of Competitiveness Procedures		Model 2: Preference of Financial Structures	
		Reference Category: Full and Open Competition		*Reference Category: Firm-Fixed Price Contracts*	
		Not Competed	Exclusion	Time/Labor	Cost
		RR *(z)*	RR *(z)*	RR *(z)*	RR *(z)*
SAP	Explanatory	0.43 (-19.73)***	0.53 (-12.86)***	0.51 (-9.06)***	0.12 (-13.78)***
Service	Complexity	2.11 (12.19)***	1.76 (8.28)***	3.13 (6.27)***	1.63 (2.78)**
Professional Services	Complexity	1.74 (10.85)***	0.68 (-5.87)***	9.61 (26.03)***	6.09 (18.17)***
Research	Complexity	0.59 (-8.58)***	1.08 (1.23)	2.20 (6.83)***	7.57 (20.06)***
Training	Complexity	1.13 (0.88)	0.59 (-2.52)*	1.37 (1.16)	3.15 (4.71)***
IT	Complexity	2.72 (11.74)***	0.95 (-0.44)	5.94 (15.75)***	2.36 (5.46)***
Construction	Complexity	0.78 (-5.25)***	0.88 (-2.50)*	0.14 (-10.14)***	0.20 (-8.38)***
Cabinet Department	Agency	0.72 (-4.99)***	0.47 (-9.11)***	8.19 (14.97)***	4.79 (13.44)***
Distributive	Agency	0.38 (-22.63)***	1.31 (4.40)***	0.38 (-15.57)***	1.17 (2.17)*
Redistributive	Agency	3.14 (16.80)***	1.61 (5.61)***	1.26 (2.42)*	0.32 (-8.45)***
Regulatory	Agency	2.08 (15.65)***	1.53 (6.61)***	0.88 (-1.85)	0.19 (-21.51)***
Constituent Services	Agency	1.15 (2.69)**	0.82 (3.12)**	1.05 (0.65)	1.21 (1.95)
Professional Staff Ratio	Agency	2.57 (6.52)***	1.06 (0.31)	4.80 (7.28)***	12.86 (9.87)***
Age	Agency	0.99 (-13.82)***	0.99 (-0.90)	1.00 (3.86)***	1.00 (0.39)
Size (ln)	Agency	1.12 (5.64)***	1.23 (7.79)***	0.90 (-3.60)***	1.16 (4.25)***
Budget ($ mns)	Agency	1.00 (6.36)***	1.00 (3.01)**	0.99 (-6.53)***	0.99 (-2.37)*
Pct. Agency Budget	Importance	0.99 (-2.46)**	0.97 (-2.76)**	-0.99 (-0.10)	1.00 (2.86)**
Pct. Firm Revenue	Importance	0.99 (-3.50)***	1.01 (4.08)***	1.03 (8.32)***	1.03 (7.81)***
Bids Received	Market	0.99 (-4.21)	0.99 (-3.35)	0.98 (-8.82)***	0.99 (-5.15)***
Fourth Quarter	Market	1.13 (3.91)***	0.92 (-2.14)*	1.07 (1.40)	1.21 (3.61)***
Recession	Market	1.26 (6.06)***	1.67 (11.81)***	1.54 (7.51)***	0.66 (-5.55)***
Emergency	Market	1.52 (2.15)*	0.54 (-2.19)*	1.24 (0.40)	0.44 (-0.81)
Constant		0.21 (-6.84)***	0.04 (-10.89)***	0.01 (11.53)***	0.00 (-14.69)***
		Ps. R^2 = 0.16		*Ps. R^2 = 0.34*	
n = 24,396 * = p < 0.05, **=p<0.01, ***=p<0.001					

Table 4. Effect of SAP on Equity and Transparency Procedures

Variable	Type	**Model 3:** Minority-Owned	**Model 4:** Woman-Owned	**Model 5:** Veteran-Owned	**Model 6:** Small Business	**Model 6a:** CO Sm. Business
		OR (z)	*OR (z)*	*OR (z)*	*OR (z)*	*OR (z)*
SAP	Explanatory	0.81 (-4.47)***	1.27 (4.80)***	0.98 (-0.36)	0.79 (-5.32)***	1.50 (9.67)***
Service	Complexity	1.24 (3.25)**	1.24 (2.72)**	1.30 (3.91)***	1.03 (0.44)	0.84 (-3.31)***
Professional Services	Complexity	1.20 (3.08)**	1.46 (6.07)***	0.81 (-2.88)**	1.29 (4.85)***	1.37 (6.44)***
Research	Complexity	0.83 (-2.86)**	0.99 (-0.05)	0.44 (-8.26)***	0.69 (-5.50)***	1.17 (2.92)**
Training	Complexity	0.80 (-1.38)	2.61 (6.60)***	0.65 (-1.76)	1.01 (0.05)	0.94 (-0.49)
IT	Complexity	2.66 (12.77)***	1.43 (3.79)***	1.26 (2.18)*	2.81 (13.57)***	1.81 (7.51)***
Construction	Complexity	2.01 (14.40)***	1.20 (3.16)**	1.09 (1.39)	3.36 (26.32)***	4.30 (28.48)***
Cabinet Department	Agency	0.47 (-11.37)***	0.43 (-10.35)***	0.54 (-6.05)***	0.40 (-13.44)***	0.28 (-19.65)***
Distributive	Agency	0.75 (-6.17)***	1.01 (0.16)	0.83 (2.76)**	0.99 (-0.24)	1.04 (0.92)
Redistributive	Agency	2.07 (11.03)***	1.07 (0.80)	1.16 (1.48)	1.56 (6.86)***	1.06 (0.79)
Regulatory	Agency	0.94 (-1.23)	0.97 (-0.60)	1.05 (0.61)	0.99 (-0.30)	1.28 (5.65)***
Constituent Services	Agency	0.99 (-0.01)	0.52 (-10.07)***	0.89 (-1.35)	0.73 (-6.16)***	0.37 (-19.77)***
Professional Staff Ratio	Agency	0.32 (-7.64)***	0.15 (-10.58)***	2.12 (3.39)***	0.11 (-14.48)***	0.09 (-18.06)***
Age	Agency	0.99 (-8.66)***	0.99 (-1.69)	0.99 (-1.09)	0.99 (-9.07)***	1.00 (3.12)**
Size (ln)	Agency	1.09 (4.09)***	1.03 (1.33)	1.48 (11.65)***	1.07 (3.36)***	1.18 (9.09)***
Budget ($ mns)	Agency	1.00 (4.31)***	1.00 (3.36)***	1.00 (1.45)	1.00 (2.71)**	0.99 (-2.50)**
Pct. Agency Budget	Importance	0.99 (-1.85)	0.99 (-1.09)	0.99 (-0.63)	0.99 (-2.21)*	1.00 (-3.82)***
Pct. Company Revenue	Importance	0.98 (-5.66)***	0.99 (-2.83)**	1.00 (0.86)	0.97 (10.65)***	0.99 (-0.73)
Bids Received	Market	0.99 (-4.20)***	0.99 (-1.86)	0.99 (-0.39)	0.99 (-4.18)***	1.00 (6.64)***
Fourth Quarter	Market	1.22 (6.20)***	1.04 (0.99)	1.11 (2.34)*	1.37 (10.13)***	1.12 (3.67)***
Variable	**Type**	**Model 3:** Minority-Owned	**Model 4:** Woman-Owned	**Model 5:** Veteran-Owned	**Model 6:** Small Business	**Model 6a:** CO Sm. Business
		OR (z)	*OR (z)*	*OR (z)*	*OR (z)*	*OR (z)*
Recession	Market	1.26 (6.14)***	0.97 (-0.68)	1.20 (3.47)***	1.23 (5.54)***	1.17 (4.23)***
Emergency	Market	0.66 (-1.77)	0.77 (-0.93)	0.48 (-2.09)*	0.58 (-2.53)*	0.70 (-1.75)
Constant		0.27 (-5.66)***	0.30 (-4.51)***	0.00 (-16.66)***	0.56 (-2.53)*	1.56 (2.08)*
		Ps. R^2 = 0.07	*Ps. R^2 = 0.02*	*Ps. R^2 = 0.04*	*Ps. R^2 = 0.11*	*Ps. R^2 = 0.12*

n = 24,396 * = p < 0.05, **=p<0.01, ***=p<0.001

Table 5. Effect of Discretion on Contractor Performance Reference Category: Normal Closeout

Variable	Low Closeout	High Closeout	Termination for Convenience	Termination for Default	Termination for Cause
	RR *(z)*	RR *(z)*	RR *(z)*	RR *(z)*	RR *(z)*
SAP Contracts	1.23 *(2.87)***	0.83 *(-4.04)****	0.78 *(-3.71)****	0.69 *(-2.65)***	0.71 *(2.27)**
Experience	0.85 *(2.54)**	1.07 *(1.90)*	0.76 *(-5.45)****	0.82 *(-2.56)***	0.50 *(-2.54)**
Service	2.27 *(6.33 ***)*	0.97 *(-0.43)*	0.99 *(0.05)*	0.45 *(-4.68)****	0.88 *(-0.25)*
Professional Services	1.29 *(2.89)***	0.64 *(-7.45)****	0.86 *(-1.98)**	0.59 *(-2.93)***	0.88 *(-0.28)*
Information Technology	0.44 *(-4.46)****	0.66 *(-4.57)****	0.35 *(-6.18)****	0.12 *(-2.96)***	1.02 *(0.02)*
Training	0.88 *(-0.48)*	0.86 *(-0.92)*	0.94 *(-0.26)*	0.00 *(-82.80)****	0.00 *(-22.58)****
Research	0.49 *(-5.19)****	1.09 *(1.35)*	0.50 *(5.63)****	0.36 *(-3.25)***	0.30 *(-1.26)*
Construction	0.63 *(-4.36)****	1.24 *(4.07)****	0.67 *(-4.66)****	0.94 *(0.33)*	0.25 *(-2.08)**
Number of Bids	1.00 *(1.32)*	1.00 *(4.16)****	0.99 *(-1.21)*	0.99 *(-1.36)*	0.99 *(-0.46)*
One Bid Only	1.49 *(5.24)****	0.91 *(-2.21)**	0.67 *(-6.82)****	0.50 *(-4.96)****	0.29 *(-2.78)***
More than 5 Bids	1.32 *(2.62)***	0.97 *(-0.70)*	1.29 *(3.76)****	1.81 *(4.15)****	3.05 *(3.42)****
Fourth Quarter	0.88 *(-2.13)**	0.95 *(-1.58)*	0.98 *(-0.33)*	1.02 *(0.22)*	1.34 *(0.98)*
NPO	0.80 *(-1.61)*	0.86 *(-2.01)**	0.78 *(-1.99)**	0.12 *(-2.12)**	0.00 *(-49.55)****
Small Business	0.54 *(-5.74)****	0.79 *(-4.66)****	0.98 *(0.22)*	0.50 *(-3.80)****	0.84 *(-0.31)*
Woman-Owned	1.12 *(1.30)*	1.04 *(0.85)*	0.89 *(-1.47)*	1.12 *(0.64)*	0.74 *(-0.53)*
Minority-Owned	1.07 *(0.65)*	1.14 *(2.75)***	1.13 *(1.52)*	2.03 *(3.90)****	3.87 *(2.73)***
Veteran-Owned	0.99 *(-0.09)*	1.12 *(2.00)**	1.66 *(6.70)****	3.85 *(11.07)****	4.26 *(4.28)****
Length (months)	1.00 *(3.33)****	0.99 *(-6.55)****	0.99 *(0.85)*	1.00 *(1.52)*	0.99 *(-0.01)*
10 or More Modifications	1.64 *(2.59)***	0.57 *(-6.57)****	0.57 *(-3.01)***	0.52 *(-2.39)****	0.50 *(-0.58)*
Additional Work (outside scope)	0.67 *(-2.97)***	1.83 *(3.20)***	0.83 *(-2.66)***	0.63 *(-2.55)****	1.08 *(0.31)*
Supplemental Agreement	0.69 *(-8.11)****	1.53 *(3.82)****	0.89 *(-2.27)**	0.97 *(-1.04)*	0.70 *(-0.97)*
Change Orders	0.80 *(-3.62)****	1.00 *(-0.10)*	1.24 *(2.64)***	1.22 *(2.65)****	0.89 *(-0.55)*
Positive Funding Actions	0.48 *(-8.35)****	1.02 *(2.30)**	0.98 *(-1.07)*	0.99 *(-0.11)*	0.98 *(-0.37)*
Negative Funding Actions	1.36 *(3.96)****	0.63 *(-4.73)****	1.24 *(4.73)****	1.15 *(1.35)*	1.03 *(0.08)*

Variable	**Type**	**Model 3:** Minority-Owned	**Model 4:** Woman-Owned	**Model 5:** Veteran-Owned	**Model 6:** Small Business	**Model 6a:** CO Sm. Business
		OR (z)	*OR (z)*	*OR (z)*	*OR (z)*	*OR (z)*
SAP	Explanatory	0.81 (-4.47)***	1.27 (4.80)***	0.98 (-0.36)	0.79 (-5.32)***	1.50 (9.67)***
Service	Complexity	1.24 (3.25)**	1.24 (2.72)**	1.30 (3.91)***	1.03 (0.44)	0.84 (-3.31)***
Professional Services	Complexity	1.20 (3.08)**	1.46 (6.07)***	0.81 (-2.88)**	1.29 (4.85)***	1.37 (6.44)***
Research	Complexity	0.83 (-2.86)**	0.99 (-0.05)	0.44 (-8.26)***	0.69 (-5.50)***	1.17 (2.92)**
Training	Complexity	0.80 (-1.38)	2.61 (6.60)***	0.65 (-1.76)	1.01 (0.05)	0.94 (-0.49)
IT	Complexity	2.66 (12.77)***	1.43 (3.79)***	1.26 (2.18)*	2.81 (13.57)***	1.81 (7.51)***
Construction	Complexity	2.01 (14.40)***	1.20 (3.16)**	1.09 (1.39)	3.36 (26.32)***	4.30 (28.48)***
Cabinet Department	Agency	0.47 (-11.37)***	0.43 (-10.35)***	0.54 (-6.05)***	0.40 (-13.44)***	0.28 (-19.65)***
Distributive	Agency	0.75 (-6.17)***	1.01 (0.16)	0.83 (2.76)**	0.99 (-0.24)	1.04 (0.92)
Redistributive	Agency	2.07 (11.03)***	1.07 (0.80)	1.16 (1.48)	1.56 (6.86)***	1.06 (0.79)
Regulatory	Agency	0.94 (-1.23)	0.97 (-0.60)	1.05 (0.61)	0.99 (-0.30)	1.28 (5.65)***
Constituent Services	Agency	0.99 (-0.01)	0.52 (-10.07)***	0.89 (-1.35)	0.73 (-6.16)***	0.37 (-19.77)***
Professional Staff Ratio	Agency	0.32 (-7.64)***	0.15 (-10.58)***	2.12 (3.39)***	0.11 (-14.48)***	0.09 (-18.06)***
Age	Agency	0.99 (-8.66)***	0.99 (-1.69)	0.99 (-1.09)	0.99 (-9.07)***	1.00 (3.12)**
Size (ln)	Agency	1.09 (4.09)***	1.03 (1.33)	1.48 (11.65)***	1.07 (3.36)***	1.18 (9.09)***
Budget ($ mns)	Agency	1.00 (4.31)***	1.00 (3.36)***	1.00 (1.45)	1.00 (2.71)**	0.99 (-2.50)**
Pct. Agency Budget	Importance	0.99 (-1.85)	0.99 (-1.09)	0.99 (-0.63)	0.99 (-2.21)*	1.00 (-3.82)***
Pct. Company Revenue	Importance	0.98 (-5.66)***	0.99 (-2.83)**	1.00 (0.86)	0.97 (10.65)***	0.99 (-0.73)
Bids Received	Market	0.99 (-4.20)***	0.99 (-1.86)	0.99 (-0.39)	0.99 (-4.18)***	1.00 (6.64)***
Fourth Quarter	Market	1.22 (6.20)***	1.04 (0.99)	1.11 (2.34)*	1.37 (10.13)***	1.12 (3.67)***
Variable	**Type**	**Model 3:** Minority-Owned	**Model 4:** Woman-Owned	**Model 5:** Veteran-Owned	**Model 6:** Small Business	**Model 6a:** CO Sm. Business
		OR (z)	*OR (z)*	*OR (z)*	*OR (z)*	*OR (z)*
Recession	Market	1.26 (6.14)***	0.97 (-0.68)	1.20 (3.47)***	1.23 (5.54)***	1.17 (4.23)***
Emergency	Market	0.66 (-1.77)	0.77 (-0.93)	0.48 (-2.09)*	0.58 (-2.53)*	0.70 (-1.75)
Constant		0.27 (-5.66)***	0.30 (-4.51)***	0.00 (-16.66)***	0.56 (-2.53)*	1.56 (2.08)*
		Ps. R^2 = 0.07	*Ps. R^2 = 0.02*	*Ps. R^2 = 0.04*	*Ps. R^2 = 0.11*	*Ps. R^2 = 0.12*
n = 24,396 * = p < 0.05, **=p<0.01, ***=p<0.001						

References

Adams, G. (1984). *The politics of defense contracting: The iron triangle.* Transaction Publishers.

Agranoff, R. (2005). Managing collaborative performance: Changing the boundaries of the state? *Public Performance & Management Review, 29*(1), 18–45.

Agranoff, R. (2006). Inside collaborative networks: Ten lessons for public managers. *Public Administration Review, 66*(1), 56–65.

Agranoff, R., & McGuire, M. (2003). *Collaborative public management: New strategies for local governments.* Georgetown University Press.

Bardach, E., & Kagan, R. A. (1982). *Going by the book: The problem of regulatory unreasonableness*. Transaction Publishers.

Bates, T. (1989). The changing nature of minority business: A comparative analysis of Asian, nonminority, and black-owned businesses. *The Review of Black Political Economy*, *18*(2), 25–42.

Battaglini, M., & Coate, S. (2005). *Inefficiency in legislative policy-making: A dynamic analysis.* National Bureau of Economic Research.

Bertelli, A. M., & Lynn, L. E. (2006). *Madison's managers: Public administration and the Constitution.* JHU Press.

Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly, 27*(3), 264–271.

Brant, R. (1990). Assessing proportionality in the proportional odds model for ordinal logistic regression. *Biometrics*, 1171–1178.

Brown, T. L., & Potoski, M. (2003). Transaction costs and institutional explanations for government service production decisions. *Journal of Public Administration Research and Theory, 13*(4), 441–468.

Brown, T. L., Potoski, M., & Van Slyke, D. M. (2006). Managing public service contracts: Aligning values, institutions, and markets. *Public Administration Review*, *66*(3), 323–331.

Brown, T. L., Potoski, M., & Van Slyke, D. M. (2013). *Complex contracting*. Cambridge University Press.

Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). Public value governance: Moving beyond traditional public administration and the new public management. *Public Administration Review*, *74*(4), 445–456.

Charles, M. B., Ryan, R., Castillo, C. P., & Brown, K. (2008). Safe and sound? The public value trade-off in worker safety and public infrastructure procurement. *Public Money and Management*, *28*(3), 159–166.

Cheav, V. (2013). Programs of parity: Current and historical understandings of the Small Business Act's Section 8(a) and HUBZone programs. *DePaul Bus. & Comm. LJ*, *12*, 477.

Christensen, R. K., Goerdel, H. T., & Nicholson-Crotty, S. (2011). Management, law, and the pursuit of the public good in public administration. *Journal of Public Administration Research and Theory*, *21*(suppl. 1), i125–i140.

Churchman, C. W. (1967). Guest editorial: Wicked problems. *Management Science, 14*(4), B141–B142.

Cliff, L., & Steele, J. (2007). Fulfilling the promise of E-Gov initiatives: Part II. *Public Manager*, *36*(4), 38.

Cohen, S., & Eimicke, W. B. (2008). *The responsible contract manager: Protecting the public interest in an outsourced world*. Georgetown University Press.

Cooper, P. J. (1980). Government contracts in public administration: The role and environment of the contracting officer. *Public Administration Review*, 459–468.

Copeland, C. W. (2011). *The federal workforce: Characteristics and trends* (CRS Report RL34685). Washington, DC: Congressional Research Service.

Curry, W. S. (2010). *Government contracting: Promises and perils*. CRC Press.

Federal Acquisition Regulation, 48 C.F.R. § 43.502–501 (2014).

Fernandez, S., Malatesta, D., & Smith, C. R. (2013). Race, gender, and government contracting: Different explanations or new prospects for theory? *Public Administration Review,* 73(1), 109–120.

Finer, H. (1936). Better government personnel. *Political Science Quarterly, 51*(4), 569–599.

Finer, H. (1941). Administrative responsibility in democratic government. *Public Administration Review*, *1*(4), 335–350.

Flora, C. B., & Flora, J. L. (2014). Developing entrepreneurial rural communities. *Sociological Practice*, *8*(1), 21.

Friedrich, C. J. (1935). Responsible government service under the American Constitution. In Friederich et al., *Problems of the American Public Service.* McGraw-Hill.

GAO. (2008). *Defense acquisitions: Termination costs are generally not a compelling reason to continue programs or contracts that otherwise warrant ending* (GAO-08-379). Washington, DC: Author.

Ginter, D. T. (2015). Contracting in state and local governments. In R. A. Shick (Ed.), *Government contracting: A public solutions handbook* (p. 203). Routledge.

Girth, A. M. (2014). A closer look at contract accountability: Exploring the determinants of sanctions for unsatisfactory contract performance. *Journal of Public Administration Research and Theory*, *24*(2), 317–348.

Gruber, J. E. (1987). *Controlling bureaucracies: Dilemmas in democratic governance*. University of California Press.

Hausman, J., & McFadden, D. (1984). Specification tests for the multinomial logit model. *Econometrica: Journal of the Econometric Society*, 1219–1240.

Hill, M. J., & Hupe, P. L. (2002). *Implementing public policy: Governance in theory and practice*. Wiley Online Library.

Hjern, B. (1982). Implementation research—The link gone missing. *Journal of Public Policy, 2*(3), 301–308.

Holtz, H. R. (2012). *Government contracts: Proposalmanship and winning strategies*. Springer Science & Business Media.

Kaufman, H. (1956). Emerging conflicts in the doctrines of public administration. *American Political Science Review*, *50*(4), 1057–1073.

Kelman, S. (1990). *Procurement and public management: The fear of discretion and the quality of government performance*. University Press of America.

Kettl, D. F. (2014). *Politics of the administrative process*. CQ Press.

Kickert, W. J. M., Klijn, E.-H., & Koppenjam, J. F. M. (1997). *Managing complex networks: Strategies for the public sector*. Sage.

Lindblom, C. E. (1959). The science of “muddling through.” *Public Administration Review*, 79–88.

Lipsky, M. (1969). *Toward a theory of street-level bureaucracy*. Institute for Research on Poverty, University of Wisconsin.

Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services.* Russell Sage Foundation.

Long, N. E. (1949). Power and administration. *Public Administration Review, 9*(4), 257–264.

Loscocco, K. A., & Robinson, J. (1991). Barriers to women’s small-business success in the United States. *Gender & Society*, *5*(4), 511–532.

Lowrey, Y. (2007). *Minority business development index: A data report on American minority-owned business*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=984907

Madison, J. (1788). Federalist no. 51: The structure of government must furnish proper checks and balances between the different departments. *New York Packet.*

May, P. J., & Winter, S. C. (2009). Politicians, managers, and street-level bureaucrats: Influences on policy implementation. *Journal of Public Administration Research and Theory*, *19*(3), 453–476.

Maynard-Moody, S., & Musheno, M. (2000). State agent or citizen agent: Two narratives of discretion. *Journal of Public Administration Research and Theory*, *10*(2), 329–358.

Maynard-Moody, S., & Musheno, M. (2003). *Cops, teachers, counselors: Stories from the front lines of public service*. University of Michigan Press.

Maynard-Moody, S., Musheno, M., & Palumbo, D. (1990). Street-wise social policy: Resolving the dilemma of street-level influence and successful implementation. *The Western Political Quarterly*, 833–848.

McCubbins, M. D., Noll, R. G., & Weingast, B. R. (1987). Administrative procedures as instruments of political control. *Journal of Law, Economics, & Organization*, *3*(2), 243–277.

McCubbins, M. D., & Schwartz, T. (1984). Congressional oversight overlooked: Police patrols versus fire alarms. *American Journal of Political Science*, 165–179.

Meier, K. J. (2007). *Politics and the bureaucracy.* Cengage Learning.

Meier, K. J., & McFarlane, D. R. (1995). Statutory coherence and policy implementation: The case of family planning. *Journal of Public Policy*, *15*(3), 281–298.

Meier, K. J., O’Toole, Jr., L. J. (2013). I think (I am doing well), therefore I am: Assessing the validity of administrators’ self-assessments of performance. *International Public Management Journal*, *16*(1), 1–27.

Meier, K. J., & O’Toole, Jr., L. J. (2006a). *Bureaucracy in a democratic state: A governance perspective.* JHU Press.

Meier, K. J., & O’Toole, Jr., L. J. (2006b). Political control versus bureaucratic values: Reframing the debate. *Public Administration Review*, *66*(2), 177–192.

Meyers, M. K., & Vorsanger, S. (2007). Street-level bureaucrats and the implementation of public policy. In B. G. Peters & J. Pierre (Eds.), *The handbook of public administration* (pp. 153–163). Sage Publishing.

Milward, H. B., & Provan, K. G. (1998). Principles for controlling agents: The political economy of network structure. *Journal of Public Administration Research and Theory*, *8*(2), 203–222.

Milward, H. B., & Provan, K. G. (2000). Governing the hollow state. *Journal of Public Administration Research and Theory*, *10*(2), 359–380.

Moe, R. C. (1987). Exploring the limits of privatization. *Public Administration Review*, *47*(6), 453–460.

Moe, R. C., & Gilmour, R. S. (1995). Rediscovering principles of public administration: The neglected foundation of public law. *Public Administration Review*, *55*(2), 135–146.

O'Toole, Jr., L. J. (1997). Treating networks seriously: Practical and research-based agendas in public administration. *Public Administration Review*, *57*(1), 45–52.

O'Toole, L. J., & Meier, K. J. (2004). Desperately seeking Selznick: Cooptation and the dark side of public management in networks. *Public Administration Review*, *64*(6), 681–693.

O'Toole, Jr., L. J., & Montjoy, R. S. (1984). Interorganizational policy implementation: A theoretical perspective. *Public Administration Review*, *44*(6), 491–503.

Peters, B. G., & Pierre, J. (1998). Governance without government? Rethinking public administration. *Journal of Public Administration Research and Theory*, *8*(2), 223–243.

Poocharoen, O.-o., & Ting, B. (2015). Collaboration, co-production, networks: Convergence of theories. *Public Management Review*, *17*(4), 587–614.

Porumbescu, G. (2015). Linking transparency to trust in government and voice. *The American Review of Public Administration*, *47*(5). Retrieved from https://doi.org/10.1177/0275074015607301

Potoski, M. (1999). Managing uncertainty through bureaucratic design: Administrative procedures and state air pollution control agencies. *Journal of Public Administration Research and Theory*, *9*(4), 623–640.

Rainey, H. G., & Bozeman, B. (2000). Comparing public and private organizations: Empirical research and the power of the a priori. *Journal of Public Administration Research and Theory*, *10*(2), 447–470.

Riccucci, N. (2005a). *How management matters: Street-level bureaucrats and welfare reform*. Georgetown University Press.

Riccucci, N. (2005b). Street-level bureaucrats and intrastate variation in the implementation of Temporary Assistance for Needy Families policies. *Journal of Public Administration Research and Theory*, *15*(1), 89–111.

Riley, D. D. (1987). *Controlling the federal bureaucracy*. Temple University Press.

Romzek, B. S., & Dubnick, M. J. (1987). Accountability in the public sector: Lessons from the Challenger tragedy. *Public Administration Review*, *47*(3), 227–238.

Romzek, B. S., & Johnston, J. M. (2005). State social services contracting: Exploring the determinants of effective contract accountability. *Public Administration Review*, *65*(4), 436–449.

Salamon, L. M. (2002). *The tools of government: A guide to the new governance*. Oxford University Press.

Shenson, H. L. (1990). *The contract and fee-setting guide for consultants and professionals*. John Wiley & Sons.

Smith, C. R., & Fernandez, S. (2010). Equity in federal contracting: Examining the link between minority representation and federal procurement decisions. *Public Administration Review*, *70*(1), 87–96.

Sowa, J. E., & Selden, S. C. (2003). Administrative discretion and active representation: An expansion of the theory of representative bureaucracy. *Public Administration Review*, *63*(6), 700–710.

Stoker, G. (2006). Public value management a new narrative for networked governance? *The American Review of Public Administration*, *36*(1), 41–57.

Tolbert, C. J., & Mossberger, K. (2006). The effects of e-government on trust and confidence in government. *Public Administration Review*, *66*(3), 354–369.

Vaughn, J., & Otenyo, E. E. (2007). *Managerial discretion in government decision making: Beyond the street level*. Jones & Bartlett Learning.

Vinzant, J. C., & Crothers, L. (1998). *Street-level leadership: Discretion and legitimacy in front-line public service*. Georgetown University Press.

Weimer, D. L., & Vining, A. R. (2005). *Policy analysis: Concepts and practice.* Prentice Hall.

Weingast, B. R., & Moran, M. J. (1983). Bureaucratic discretion or congressional control? Regulatory policymaking by the Federal Trade Commission. *The Journal of Political Economy, 91*(5), 765–800.

Williams, R. (2006). Generalized ordered logit/partial proportional odds models for ordinal dependent variables. *Stata Journal*, *6*(1), 58–82.

Wilson, W. (1887). The study of administration. *Political Science Quarterly*, *2*(2), 197–222.

Wise, C. R., & O'Leary, R. (2003). Breaking up is hard to do: The dissolution of judicial supervision of public services. *Public Administration Review*, *63*(2), 177–191.

Acquisition Research Program
Graduate School of Defense Management
Naval Postgraduate School
555 Dyer Road, Ingersoll Hall
Monterey, CA 93943

www.acquisitionresearch.net